



FX-401B                      FX-401R  
shown with two optional RAX-1048TZDS modules

## Description

The FX-401 Addressable Fire Alarm Control Panel is an intelligent addressable multi-zoned panel, ideal for small to medium jobs.

The FX-401 is shipped pre-assembled with mainboard, power supply, black backbox, and black or red door enclosure.

Compatible with MGC Devices (MIX-4000 Series), the FX-401 can have up to three addressable (SLC) loop with a maximum of 720 MGC devices in total.

The FX-401 is equipped with a built-in dialer. The dialer provides a means to communicate panel status to the remote central monitoring station using two dedicated phone lines.

Dimensions	
Dimensions of Enclosure (minus built in trim ring)	14.5" W x 4.2" D x 26" H (36.83 cm x 10.67cm x 66.04cm)
Complete Dimensions of Enclosures	16.3" W x 5.5" D x 27.5" H (41.40xm x 13.97 x 69.85cm)

Electrical Specifications	
Primary Input Power	120VAC 60Hz / 240VAC 50Hz 3.1 Amp / 1.57 Amp (primary)
Battery Type	24VDC Gel Cell / Sealed lead acid

## Features

Mircom's FX-401 Addressable Fire Alarm Control Panel provides the following:

- Main Board, Power Supply and Backbox.
- One on-board addressable (SLC) loop for MGC Devices (MIX-4000 Series), 240 devices per loop.
- Each SLC current capability is 200mA in standby and 400mA in alarm. SLC Maximum line resistance 40 Ohms and maximum line capacitance 0.47uF.
- Expandable to three addressable loops for a maximum of 720 MGC devices (MIX-4000 Series), 240 devices per loop.
- Multi-zone fire alarm control panel.
- Compatible with MGC devices (MIX-4000).
- Compatible with conventional detectors using MGC MIX- 4042 Conventional Zone module, refer to document LT-1023 for compatible detectors.
- Main Display with 4 x 20 LCD display.
- Class A (DCLA), Class X (DCLC), or Class B (DCLB) analog loop(s).
- Four Power Limited Class B, Class A NAC circuits (max 1.5 Amps each - 6.0 Amps total)
- NAC circuits may be configured as silenceable signal, non-silenceable signal, silenceable strobes, non-silenceable strobes, or relay output. The audible signal may be Steady, Temporal Code, California Code, or March Time.
- Supports sync strobe protocols from major manufacturers.
- Software configuration.
- Configurable Signal Silence Inhibit, Auto Signal Silence, and One-Man Walk Test.
- Two-stage, alarm verification, and positive alarm sequence operations.
- Subsequent Alarm, Supervisory, Monitor and Trouble operation.
- Dedicated common alarm, supervisory, trouble, and auxiliary alarm relays.
- Additional RAX-1048TZDS Display Adder Module can be added to provide 96 annunciation points per Adder.
- Relay Contacts for Common Alarm, Common Supervisory and Common Trouble all non disconnectable and Auxiliary Alarm Relay (disconnectable).
- Additional outputs include connections for a RTI remote trouble indicator, PR-300 Reverse Polarity Module, an RS- 485 bus for connection of up to seven RAX-LCD-LITEs, RAM- 3500-LCDs, SRM-312s and RA-1000 Series annunciators.
- Auxiliary power is available in the form of 24V FWR unfiltered and unsupervised, 24VDC filtered and regulated, and resettable auxiliary power supply.
- Built-in Dialer.
- Activation of the sounder base is controlled solely by the head to which it is attached.



## System Components



### RAM-3500 Remote Annunciator

The RAM-3500-LCD provides remote annunciation through a 4 line by 20 character LCD display. It is a direct mimic of the main panel display so that the LCD, LEDs and switches are an exact duplicate of the main display. The RAM-3500-LCD provides control switches for System Reset, Signal Silence, Fire Drill and Acknowledge, four Status Queues with selector switches and LEDs for Alarm, Supervisory, Trouble and Monitor, along with a numeric keypad to access the menu functions. The RAM-3500-LCD mounts in separately orderable single unit enclosures or in larger enclosures that support up to two optional RAX-1048TZDS remote LED annunciators. All remote enclosures are equipped with a CAT-30 Lock and key. The RAM-3500-LCD occupies one display position in the BB-1000 enclosures .



### RAX-LCD-LITE Remote LCD Annunciator

The FX-401 also supports the RAX-LCD-LITE Remote LCD Annunciator. It is equipped with a large 4-line x 20-character back-lit alphanumeric LCD display that uses a simple menu system complete with a directional keypad and switches for Enter, Menu, Cancel and Info. The RAX-LCD-Lite occupies one display position in the BB-1000 enclosures.



### RAM-1032TZDS-CC Conformal Coated Main Remote LED Annunciator

The RAM-1032TZDS-CC Conformal Coated Main Remote LED Annunciator provides common annunciator functions and 32 points of LED annunciation. The RAM-1032TZDS-CC has indicators for A.C. On, Common Trouble and Signal Silence and controls for System Reset, Lamp Test, Fire Drill, Buzzer Silence and Signal Silence. Each display point can be identified by the slide-in label that slides in beside the LED. The RAM-1032TZDS-CC occupies one display position in the BB-1001WP(R)A or BB-1002WP(R)A enclosures.



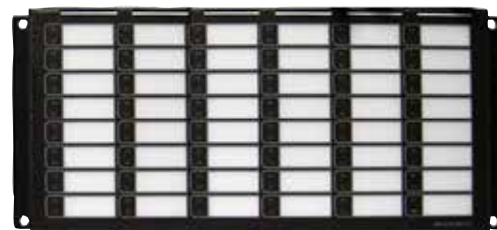
### RAM-1032TZDS Main Remote LED Annunciator

The RAM-1032TZDS Main Remote LED Annunciator provides common annunciator functions and 32 points of LED annunciation. The RAM-1032TZDS has indicators for A.C. On, Common Trouble and Signal Silence and controls for System Reset, Lamp Test, Fire Drill, Buzzer Silence and Signal Silence. The RAM-1032TZDS occupies one display position in the BB-1000 enclosure.



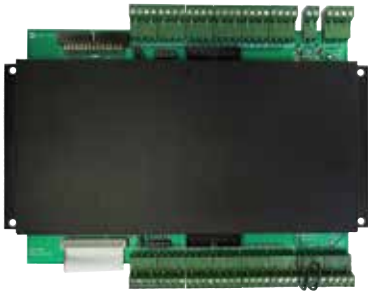
### RAX-1048TZDS-CC Conformal Coated Programmable LED Annunciator Module

The RAX-1048TZDS-CC Conformal Coated Programmable LED Annunciator Module provides 48 programmable bi-colored LEDs. The RAX-1048TZDS-CC connects to the main control unit or main annunciator module (RAM-1032TZDS) when mounted remotely. Each display point can be identified by the slide-in label that slides in besides the LED. The RAX-1048TZDS occupies one display position in the BB-1001WP(R)A or BB-1002WP(R)A Series enclosures.



### RAX-1048TZDS Programmable LED Annunciator Module

The RAX-1048TZDS Programmable LED Annunciator Module provides 48 programmable bi-colored LEDs. The RAX-1048TZDS connects to the main control unit or main annunciator module (RAM-1032TZDS) when mounted remotely. Each display point can be identified by the slide-in label that slides in beside the LED. The RAX-1048TZDS occupies one display position in the BB-1000 Series enclosures.



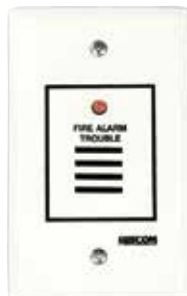
#### **AGD-048 Graphic Annunciator Adder Driver Board**

The AGD-048 Adder Graphic Driver Module can be used with the MGD-32 Master Graphic Driver modules, or if located remotely it must be connected and mounted with the RAX-LCD Shared Display. The AGD-048 will support an additional 48 supervised outputs. As with the master modules, the AGD-048 will support both LEDs and incandescent lamps.



#### **MGD-32 Master Graphic Driver Module**

For use with FX-401 Fire Alarm Control Panel. The MGD-32 Master Graphic Driver Module provides common control inputs for the switches such as System Reset, Signal Silence, Auxiliary Disconnect, Fire Drill, Lamp Test and Acknowledge.



#### **RTI-1 Trouble Remote Indicator**

Mircom's Remote Trouble Indicator provides remote annunciation of fire alarm troubles. The RTI-1 mounts onto a standard single gang electrical box. The RTI-1 can be used with any of Mircom's fire alarm control panels.



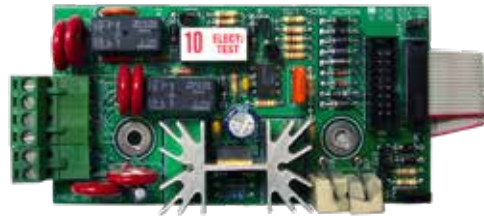
#### **UIMA4 Interface for Configuring MGC Fire Panels**

The UIMA4 is an interface for configuring FX-401. The UIMA4's ribbon cable can be disconnected and replaced – the replacement part number is RPL-WC-25022 (it comes with 3 replacement cables). The UIMA4 interface has 3 connectors: 9 pin male serial connector, USB B female connector, and 10 pin female connector.



#### **ALC-480 480-Point Dual Loop Adder**

The ALC-480 provides two addressable (SLC) loop for MGC Devices (MIX-4000 Series), 240 devices per loop. 480 devices total in loop Adder.



#### **PR-300 Polarity Reversal/City Tie Module**

The PR-300 provides outputs for city box and polarity reversal applications. As a city tie module, the PR300 provides an interface between the control panel indicating circuits and a master box. It provides off-premises signal transmission for systems that must comply with NFPA requirements for Auxiliary Protective Systems. As a polarity reversal module, the PR-300 provides an interface between the control panel and a reverse polarity receiver.



#### **MP-300 End of Line Plates**

Mircom's MP-300 is a 3.9K End Of Line resistor for use with Mircom conventional panels and detection circuits.





#### BB-1001WP(R)A Outdoor Weather Protected Enclosure

The BB-1001WP(R)A is a complete enclosure that comes with either a RED or WHITE door, a black back-box, two keys and a durable lock at the top of the door. The door comes hinged to the bottom side of the box for added weather protection. The box is capable of handling one RAM-1032TZDS-CC Main Annunciator Chassis which provides up to 32 points of annunciation. RAM-1032TZDS-CC is ordered separately to conform with the UL, ULC installation requirements.

**Note: there is no need for thermostat or heater. RAM-1032TZDS-CC must be ordered separately to match UL, ULC installation requirements.**



#### BB-1002WP(R)A Outdoor Weather Protected Enclosure

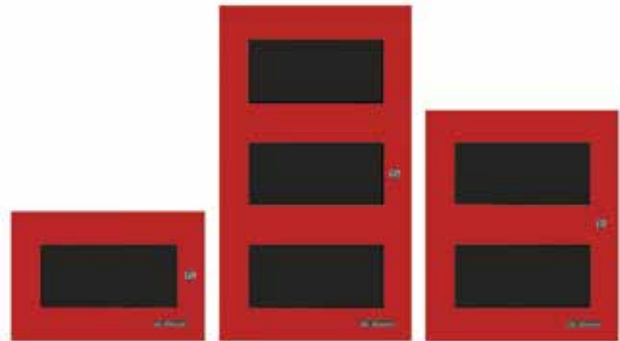
The BB-1002WP(R)A is a complete enclosure that comes with either a RED or WHITE door, a black back-box, two keys and a durable lock at the top of the door. The door comes hinged to the bottom side of the box for added weather protection. The box is capable of handling one RAM-1032TZDS-CC Main Annunciator Chassis which provides up to 32 points of annunciation and one RAX1048TZDS-CC Adder Annunciator, which provides up to 48 points of annunciation. RAM-1032TZDS-CC and RAX1048TZDS-CC are ordered separately to match the UL, ULC installation requirements.

**Note: there is no need for thermostat or heater. RAM-1032TZDS-CC and RAX-1048TZDS-CC must be ordered separately to match UL, ULC installation requirements.**



#### SRM-312R Smart Relay Module with Red Enclosure

The SRM-312R provides twelve configurable relay circuits, rated @ 28 VDC, 1 amp (resistive). Each circuit can be configured as a Normally Open (N.O.) or Normally Closed (N.C.) contact. Each relay is equipped with an LED that is lit when the relay is energized. The relays can be configured as relay per zone (1 to 1), Common on Alarm, Common on Supervisory or programmable for a logical or adjacent zone configuration. An adjacent zone configuration will turn on an adjacent zone when the configured zone is active. A chaining configuration allows for multiple relays to turn on. The SRM-312R is DIP switch configurable and connects to the RS-485 bus. The SRM-312R come complete with a red enclosure and a CAT-30 lock and key.



#### BB-1001 / 2 / 3 / 8 / 12 Remote Annunciator Enclosures

The BB-1000 Series comes complete with a backbox, door and hinge. The enclosures doors come with Lexan windows, two keys and a durable lock. The enclosures can handle the RAM-1032TZDS, RAM-3318-LCD, RAXN-LCD-LITE, Main Annunciator Chassis.

BB-1001D / DR / DS / DB	9" H x 12.75" W x 1.85" D
BB-1002D / DR / DS / DB	18" H x 12.75" W x 1.85" D
BB-1003D / DR / DS / DB	26.4" H x 12.75" W x 1.85" D
BB-1008D / DR / DB	33" x 22.5" W x 1.85" D
BB-1012D / DR / DB	45" H x 22.5" W x 1.85" D

## Ordering Information

Model	Description
<b>Panel</b>	
FX-401B	Intelligent Fire Alarm Control Panel - Black door
FX-401R	Intelligent Fire Alarm Control Panel - Red door
<b>Annunciators</b>	
RAM-3500-LCD	Remote Annunciator with 4-Line LCD Display
RAX-LCD-LITE	Remote Annunciator with 4-Line LCD Display
RAM-1032TZDS	32 Point Remote Main Annunciator with 32 Trouble and Alarm LEDs
RAM-1032TZDS-CC	Conformal Coated 32 Point Remote Main Annunciator with 32 Trouble and Alarm LEDs
RAX-1048TZDS	Adder Annunciator Chassis c/w 48 Bi-Colored LEDs
RAX-1048TZDS-CC	Conformal Coated Adder Annunciator Chassis c/w 48 Bi-Colored LEDs.
MGD-32	Master Graphic Driver Board
AGD-048	Adder Graphic Driver Board
SRM-312R	Smart Relay Module with Red Enclosure. Supports up to 12 relays
<b>Optional Adder Modules</b>	
ALC-480	480 Point Dual Loop Adder
PR-300	Polarity reversal and City Tie Module
<b>Enclosures</b>	
BB-1001D	White Remote Annunciator Enclosure. Houses one module.
BB-1001DR	Red Remote Annunciator Enclosure. Houses one module.
BB-1001DS	Stainless Steel Remote Annunciator Enclosure Houses one module.
BB-1001DB	Black Remote Annunciator Enclosure Houses one module.
BB-1002D	White Remote Annunciator Enclosure. Houses two modules.
BB-1002DR	Red Remote Annunciator Enclosure. Houses two modules.
BB-1002DS	Stainless Steel Remote Annunciator Enclosure. Houses two modules.
BB-1002DB	Black Remote Annunciator Enclosure. Houses two modules.
BB-1003D	White Remote Annunciator Enclosure. Houses three modules.
BB-1003DR	Red Remote Annunciator Enclosure. Houses three modules.
BB-1003DS	Stainless Steel Remote Annunciator Enclosure. Houses three modules.
BB-1003DB	Black Remote Annunciator Enclosure. Houses three modules.
BB-1008D	White Remote Annunciator Enclosure .Houses eight modules.
BB-1008DR	Red Remote Annunciator Enclosure. Houses eight modules.
BB-1008DB	Black Annunciator Enclosure. Houses eight modules.
BB-1012D	White Remote Annunciator Enclosure. Houses twelve modules.
BB-1012DR	Red Remote Annunciator Enclosure. Houses twelve modules.
BB-1012DB	Black Annunciator Enclosure. Houses twelve modules.
BB-1001WPA	Outdoor Weather Protected Enclosure, White Door. Houses one module.
BB-1001WPRA	Outdoor Weather Protected Enclosure, Red Door. Houses one module.
BB-1002WPA	Outdoor Weather Protected Enclosure, White Door. Houses two modules.
BB-1002WPRA	Outdoor Weather Protected Enclosure, Red Door. Houses two modules.
<b>Accessories</b>	
RTI-1	Common Remote Trouble Indicator, Buzzer and LED
MP-300	End of Line Resistor plate. 3K9
BC-160R	External Battery Cabinet - Red
BAT-12V12A	Battery 12AH
BAT-12V18A	Battery 18AH
BAT-12V26A	Battery 26AH (To house BAT-12V26A (26 AH) batteries an external BC-160 Battery Cabinet is required.)
BAT-12V42A	Battery 42AH (To house BAT-12V42A (42 AH) batteries an external BC-160 Battery Cabinet is required.)
UIMA4	Interface for Configuring MGC Fire Panels

## Ordering Information cont'd

MGC-CONFIG-KIT4	Fire Panel Configuration KIT with UIMA4
RPL-WC-25022	Replacement Ribbon Cable for UIMA4 (Pack of 3)
<b>MGC Devices</b>	
MIX-4001	6" Diameter Base
MIX-4002	4" Diameter Base
MIX-4010	Photoelectric Smoke Sensor
MIX-4010-ISO	Photoelectric Smoke Sensor with Built-in Short Circuit Isolator
MIX-4020	Multi-Sensor Detector
MIX-4020-ISO	Multi-Sensor Detector with Built-in Short Circuit Isolator
MIX-4030	Tri-Mode Heat Detector
MIX-4030-ISO	Tri-Mode Heat Detector with Built-in Short Circuit Isolator
MIX-4040	Dual Input Module
MIX-4041	Mini Dual Input Module
MIX-4042	Conventional Zone Module
MIX-4045	Dual Relay Module
MIX-4046	Supervised Output Module
MIX-4050	Sync Module
MIX-4070	Short Circuit Isolator Module
MIX-4090	MGC Devices Programmer
MS-401MPU	Intelligent Single Stage Manual Station MP
MS-407MPU	Intelligent Single Stage Manual Station MP with Additional N.C. Switch
MS-710MPU	Intelligent Key-Resettable Single Stage Dual Action Manual Station MP



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